

Serial No. 09/845,770
Amtd. Dated September 21, 2004
Reply to Office Action of July 7, 2004

REMARKS/ARGUMENTS

Prior to this Amendment, claims 1-29 were pending in the application.

Claim 1 is amended to more clearly claim the subject matter of the invention not shown by the cited references (with claim 7 being amended to provide proper antecedent basis from the amended claim 1). Independent claim 16 is amended to include a limitation of dependent claim 21, which is canceled. Claims 23 and 24 are canceled. Independent claim 25 is amended to include limitations similar to claim 1 in system form. Independent claim 26 is amended to include limitations similar to claim 16 in system form. Independent claim 27 is amended to include limitations similar to claim 1 in the form of a computer program product. Independent claim 28 is canceled. Independent claim 29 is amended to include limitations similar to claim 16 in the form of a computer program product. No new matter is added and support is found at least in the originally filed claims and figures.

Claims 1-20, 22, 25-27, and 29 remain for consideration by the Examiner.

Rejections under 35 U.S.C. §102

In the July 7, 2004 Office Action, claims 1-3, 5-9, 13-14, 16-20, and 22-29 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 6,446,134 ("Nakamura"). Claims 23, 24, and 28 are canceled. The rejection of claims 1-3, 5-9, 13-14, 16-20, 22, 25-27, and 29 is traversed based on the following remarks.

Nakamura fails to support a rejection of claim 1 because it does not teach or even suggest each and every element of amended claim 1. Nakamura does not show "using a plurality of components to each represent a set of hardware and software." As noted in the Office Action in paragraph 3.a, Nakamura teaches "a plurality of servers, manager units and communication channels", which fails to describe using components to "represent a set of hardware and software." Nakamura further fails to show maintaining redundancy by "assigning at least one of the plurality of components to provide a service." For at least these reasons,

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Nakamura does not support the rejection of claim 1 as asserted in the Office Action, and the rejection should be withdrawn.

Further, Nakamura fails to show or suggest "assigning operating states to the assigned documents." The Office Action in its rejection of claim 7 (see para. 8.i) notes "Nakamura discloses a system with a service monitor unit that monitors the state of service units. (Lines 10-14 of Column 5)." At this citation and elsewhere, Nakamura is discussing detecting fault information for a "service unit" (element 15) of a "server unit" (element 13). Nakamura provides no teaching of "assigning operating states" but merely teaches detecting operating states (i.e., online or offline based on fault information). Nakamura also fails to teach "modifying the assigned operating states." For these additional reasons, Nakamura does not support a 102 rejection, and it is requested that the rejection of claim 1 be withdrawn.

Claims 2, 3, and 5-9 depend from claim 1 and are believed allowable as depending from an allowable base claim. Further, claim 7 calls for the operating states of the plurality of components to include "off-line, spare, secondary, and primary." The Office Action cites Nakamura for disclosing a system where units can be on/off or stop/start, but this provides no teaching of operating states of spare, secondary, and primary. For this additional reason, Nakamura fails to anticipate claim 7.

Nakamura also fails to anticipate each element of independent claim 16, and the rejection based on Nakamura of claim 16 should be withdrawn. Specifically, Nakamura fails to teach "monitoring health...including health of the plurality of components and health of the plurality of nodes." As discussed with reference to claim 1, Nakamura does not teach components that are used to represent hardware and software, and, hence, cannot teach monitoring the health of such components. Further, Nakamura fails to teach monitoring the health of a node including such components. The Office Action cites Nakamura at lines 18-25 of col. 2, but at this citation, Nakamura is merely discussing monitoring for fault information and does not teach monitoring the health of a node of components. Further, Nakamura teaches

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monitoring fault information for individual servers but provides no teaching of "detecting ... a failure of a node in the plurality of nodes." Nakamura may teach detecting a failed server unit but does not teach detecting failure of a node (which may include a number of such servers and applications running on the servers as well as additional "hardware and software"). Hence, Nakamura does not support a 102 rejection of claim 16, and this rejection should be withdrawn.

Further, Nakamura fails to show "migrating one of the plurality of components from one node to another node in the plurality of nodes." The Office Action in rejecting claim 21 cited U.S. Pat. No. 6,598,174 ("Parks") for teaching "migrating data" to provide redundancy. However, in claim 16, a component represents "hardware and software" and, therefore, teaching related merely to data transfer fails to teach migrating a component as called for in claim 16 from one node to another node. For this additional reason, claim 16 is allowable over Nakamura when considered alone or in combination with Parks.

Claims 17-20 and 22 depend from claim 16 and are believed allowable as depending from an allowable base claim.

Independent claim 25 is directed to a system with limitations similar to claim 1 but written in "means for" format. Hence, Nakamura fails to teach the system of claim 25 for at least the reasons provided above for claim 1.

Independent claim 26 is directed to a system with limitations similar to independent claim 16 but written in "means for" format. Claim 26 is believed allowable at least for the reasons for allowing claim 16.

Independent claim 27 is directed to a computer program product with limitations similar to claim 1, and the reasons provided above that Nakamura fails to teach all elements of claim 1 are applicable to claim 27. Claim 27 is in condition for allowance.

Likewise, claim 29 is directed to a computer program product with limitations similar to claim 16. As discussed with reference to claim 16, Nakamura fails to teach

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or even suggest each and every limitation of the invention. Hence, Nakamura does not support a rejection of claim 29.

Rejections under 35 U.S.C. §103

Also, in the Office Action, claims 4, 10-12, 15, and 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nakamura further in view of U.S. Pat. No. 6,598,174 ("Parks"). Claims 4, 10-12 and 15 depend from claim 1 and are believed allowable as depending from an allowable base claim. Additionally, Parks fails to overcome the deficiencies of Nakamura discussed above with reference to claim 1. Claim 21 is canceled.

Conclusions

The references made of record by the Examiner but not relied upon have also been considered but are believed no more relevant than the references cited and relied upon. The pending claims are believed allowable over these additional references.

Based on the foregoing discussion and the claim amendments, the pending claims are believed to be allowable and the case in condition for allowance.

No fee is believed due, but any fee deficiency associated with this submittal may be charged to Deposit Account No. 50-1123.

Respectfully submitted,

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